Abstract

Optimizing performance of physical disk drives in a disk array storage device with a plurality of logical volumes is accomplished by accumulating statistics over an interval to select two logical volumes for an exchange. After testing to determine any adverse effect of making that change, the exchange occurs to more evenly distribute the loading on individual physical disk storage devices. One set of statistics, seek time, is obtained by combining estimated disk access information and an interpolated seek time obtained from a template that stores characteristics seek times among different pairs of segments that define a physical disk device independently of a logical volume configuration.